



Publication Update & Administrative Notes

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Note: The views expressed in this presentation are those of the authors and may not necessarily represent the views of the Federal Communications Commission.



Publication Update & Administrative Notes

This presentation will cover:

- Publications
 - Recently expired & updated publications.
 - Draft 996369 Module Certification Guide DR08-44859
 - Publications scheduled in the near term.
- Administrative Notes
 - Audit request for error corrections.



Publication Update

Publication Retired

- **926956 D01 U-NII Transition Plan (10/25/2022).**
 - Presented at April 2022 workshop. Guidance for UNII note codes: 38, 39, 48, 49 have been expired and not to be used for new grants . This publication, 926956, remained published until recently for reference and is now **retired**

Publications Updated:

- **634817 D01 Freq Range Listing for Grants v04r01 to v04r02 (10/25/2022).**
 - Added to section III. 731 LINE COUNT multiple channels. Bandwidths, emission types & bands **to include 5G**.
- **610077 D02 Surveillance Summary Report v01 to v01r01(10/25/2022).**
 - Updated to clarify questions based on **feedback received from TCBs**.
- **206256 D01 Wireless Microphones v02 to v02r01(10/25/2022).**
 - Section II item (h) was added: **Modules not permitted** under equipment Class DWM.



Publication Update

- **285076 D01** HAC Guidance v06r01to V06r02 (09/19/2022)
 - Clarifications: for **transition date** for C63.19-2011 and C63.19-2019 is the date of the grant: C63.19-2019 required after June 4, 2023, and C63.19-2011 not permitted.
 - Standard **transition for Labs** to C63.19-2019 (discussed in session 1.3 Equipment Authorization System- Update)
- **285076 D04** Volume Control v01to v01r01 (10/25/2022).
 - Clarification for TIA 5050. **All codecs** must comply over **all air interfaces** for handset to be counted as HAC complaint per **§20.19(b)(3)** of the rules .
- **388624 D02** Pre-Approval Guidance List v18r02 to v18r03 (10/25/2022).
 - Added **MODLIM** for limited Modules.
 - Added **MODHES** for Host Environment Simulator (HES) design for Split Modules under **D05 Split Module** .



Publication Update

- **Draft 447498 D01** General RF Exposure Guidance DR05-44791
 - Posted 08/17/2022 – expired 10/21/2022.
- **996369** Module publication:
 - **D05 Split Module v01** (10/25/2022) from a **Draft DR07** (posted 07/19/2022 exp 08/30/2022),
 - **996369 D03** OEM Manual v01to v01r01 ((10/25/2022))
 - **Clarification:** 2.7Antennas:for licensed basic and fixed devices , Added 2.11 EMC considerations, 2.12 recommendation for contact information as to How to make changes.
 - **Draft 996369 Module** Certification Guide DR08 (post10/25/2022 to exp 12/02/2022).
 - **Discussion to follow:**



Draft D01 Module Certification Guide DR08

- **Restriction** for **licensed split module** transmitters **removed**.
- Split Module Guidance **D05 Split Module v01 Published**.
- Module certifications do not apply to **Part15B** unintentional radiators, or to **Part 18** devices.
- Modules **not permitted** for certain specific **equipment classes**:

5GM	Part 30 Mobile Transmitter	N
5GT	Part 30 Transportable Transmitter	N
6PP	15E 6 GHz Subordinate Indoor Device	N
B2I	Part 20 Industrial Booster (CMRS)	N
B2P	Part 20 Provider-Specific Consumer Booster (CMRS)	N
B2W	Part 20 Wideband Consumer Booster (CMRS)	N
B9A	Part 90 Class A Industrial Booster (non-SMR)	N
B9B	Part 90 Class B Industrial Booster (non-SMR)	N
BOS	All other signal boosters other than 20.21/90.219	N
DWM	Part 15 Wireless Microphone	N

- Added PAG item “**MODLIM**” is required for limited module to review the method described to ensure host compliance.



Integration Instructions

Example 11 items

Subjects			
1	Rules that Apply		
2	Host restrictions imposed by Rules: e.g., Indoor, outdoor elevation angle, on aircraft below, etc.		
3	Limited modules must file alternative method used to ensure host compliance. Host manufacture required to follow the procedure: what ever it is.		
4	Trace antenna designs, full-detail design required to be provided to the host Manufacture.		
5	RF Exposure; module confined to the conditions certified: Reference to 447498 sections		
	Fixed	Mobile	Portable
	4.1	4.2	4.3
6	Antennas permitted: <ul style="list-style-type: none">• Part 15 devices: §§ 15.203, 15.204(b), and 15.204(c)• Licensed (non-client station) Modules for a base, fixed station can be stated as conducted, and antenna data is not required.• Licensed (client devices). Same as Part 15 devices.		



Integration Instructions Example

Subjects	
7	Host label required: “Contains FCC ID: XYZMODEL1”
8	Information on test modes and additional testing requirements
9	Additional testing, Part 15 Subpart B disclaimer
10	Note: Host Guidance provided in D04 Module Integration Guide
11	How to get a change to the conditions of Use stated in #5



A Module Must Define the RF Exposure Conditions of Use Following 447498 Guidance

- **Grantee** of a module must establish the **conditions** based on the RF exposure policy prescribed in 447498 and its Table 1: Equipment Authorization Policies.
- A module can be granted containing either a single transmitter or multiple transmitters, and either transmitting simultaneously or individually, and requires an **RF exposure exhibit*** describing the configuration of use, i.e.
 - Fixed station (both Occupational and General Population Exposure).
 - Mobile, per § 2.1091
 - Portable**, use per § 2.1093
- Host manufacturers **can only** use a module certification for the conditions established by the **grant***** and as explained in the integration instructions. Only the Grantee can change the grant conditions (discussed in the next slide).
- A host manufacturer **can not** use a module while **operating simultaneously** with any other transmitters if not granted with the module certification. Only the Grantee can change this condition (discussed in the next slide).

***RF exposure exhibits must demonstrate the OET Equipment Authorization Policies following Table 1 of KDB 447498. These policies include RF exposure test exemptions (section 2 of 447498, for both SAR and MPE as applicable), based on power thresholds and separation distances, including the 1-mw exemption valid for any separation distance.**

****Modules may be granted with separation distance requirements less than < 20 cm but > X cm) if qualify for RF Exposure test exemptions per KDB 447498**

***** Module with portable grants may also be used in mobile configuration hosts (i.e., with separation distance >20 cm).**



Changing the RF Exposure Conditions of Use Established by the Initial Grant

- For modules in stand-alone integration use (i.e., without other transmitters in the host operating simultaneously with the module), a **change** from **mobile to portable** requires a **C2PC*** on the module grant.
- The C2PC filing must provide the appropriate **RF exposure exhibits** showing compliance with Table 1 of KDB 447498. For example:
 - Providing required **SAR evaluations** data for a specific host.
 - Showing how a module qualifies for a **SAR test exemptions**.
- Adding **simultaneous operation** with another transmitter(s) (not certified with the module) requires a **C2PC*** on the module grant.
- The C2PC filing must provide the applicable **RF exposure exhibits** showing RF exposure compliance per KDB 447498, including all the additional transmitters (s) operating simultaneously and any change from mobile to portable.

* Only the Grantee can do a C2PC. A Host Integrator may first do a Change-In-ID to become the Grantee, and then do the C2PC to address the changes from mobile to portable and/or simultaneous transmission mode.



Standalone Mode & Simultaneous Transmitters EMC considerations

- For standalone mode, the guidance in D04 Module Integration Guide recommends that host manufactures **use best RF engineering practices** to confirm continued compliance with EMC requirements, by evaluating the module transmitter operating in the host.
 - D04 Module Integration Guide recommending "best practice" RF design engineering testing and evaluation in case non-linear interactions generate additional non-compliant limits due to module placement to host components or properties.
- An **EMC evaluation** test is required for **simultaneous transmissions**, see D02 Module Q&A Question 12, to confirm compliance.
 - Since the module was not certified with any other, a C2PC or new FCC ID would typically be required. However, KDB policy permits, by D02 Q&A Q12, that a host manufacture only needs to do an evaluation (i.e., no C2PC required when no emission exceeds the limit of any individual device (including unintentional radiators) as a composite (i.e., § 2.947). The host manufacturer must resolve any failure.

* Standalone mode is when a host does not use a module with any other transmitter (either module or not) simultaneously.



Standalone Mode & Simultaneous Transmitters EMC considerations

- In Both cases (standalone and simultaneities) the evaluation test shall be performed with all devices operating, including unintentional (15B) radiators, for both the standalone and simultaneous cases. If the evaluation testing confirms that no emissions exceed the limit of any individual transmitter or unintentional radiator (i.e., § 2.947), no additional C2PC is required. If any emission exceeds an applicable limit, the host manufacturer must make corrective changes to bring the device into compliance.



Publications Scheduled in the Near Term.

- **996369** clarifications to D02, and D04
 - Update similar 996369 D01 Draft
- **53028 D01** Antennas Part 15 Transmitters v01r01
 - Antenna details required by rule part (discussed in session)
- **447498 RF** Exposure Draft Status:
 - RF Exposure Transition period extended to June 30, 2022: Presentation to follow.: Alfonso Tarditi/Tim Harrington.
- **388624 D02** Pre-Approval Guidance List v18r02
 - An active list of PAG items is expected to change frequently, adding a deleted PAG items.
- The following The following major guidance publications are under review for update:
 - **641163 D01** TCB Program Roles and Resp v04r01
 - **853844 D01** Accredited Lab Checklist v02r02
 - **974614 D01** Accredited Test Lab Roles and Resp v05r01
 - **974614 D02** AB Recognition v01r01



Administrative Notes

- TCB audit mode inquiry request to correct filing errors:
 - After 30 days from the grant, only significant errors pertinent to the certification will be allowed to be updated.
 - Include a justification as to why the error is relevant to the certification.
 - Include the correction, i.e., corrected text or exchanged exhibits, whatever is applicable.
 - Depending on the error, FCC staff may require the TCBs to implement corrective processes to prevent future occurrences.



Questions?

THANK YOU